

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: LUMARK

Report Number: P881880

Luminaire Tested: **NAV-SB1C-727-U-T4FT-HSS**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P881880  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-25)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB1C-727-U-T4FT-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(1) 70 CRI, 2700K, 615mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV FORWARD  
THROW OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

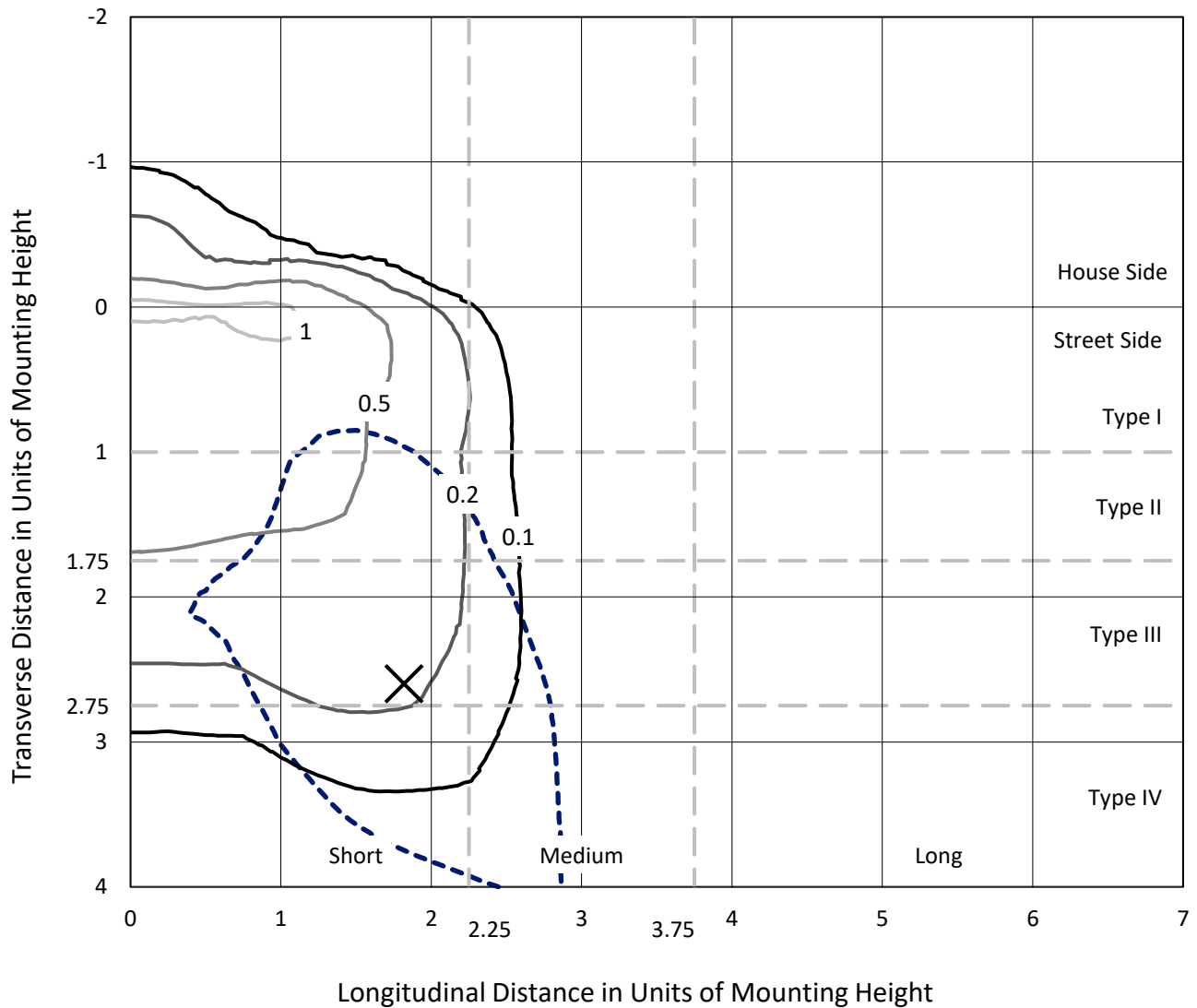
Lumens per Lamp: N/A  
Luminaire Lumens: 5143 lumens  
Efficiency: N/A  
Efficacy: 94.5 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G2  
  
Input Watts (W): 54.4  
Input Voltage (V): 120.0  
Input Current (Ain): 0.437  
Voltage Rise (V): NR  
Power Factor: 0.993  
Total Harmonic Distortion (THDi): 9.314  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

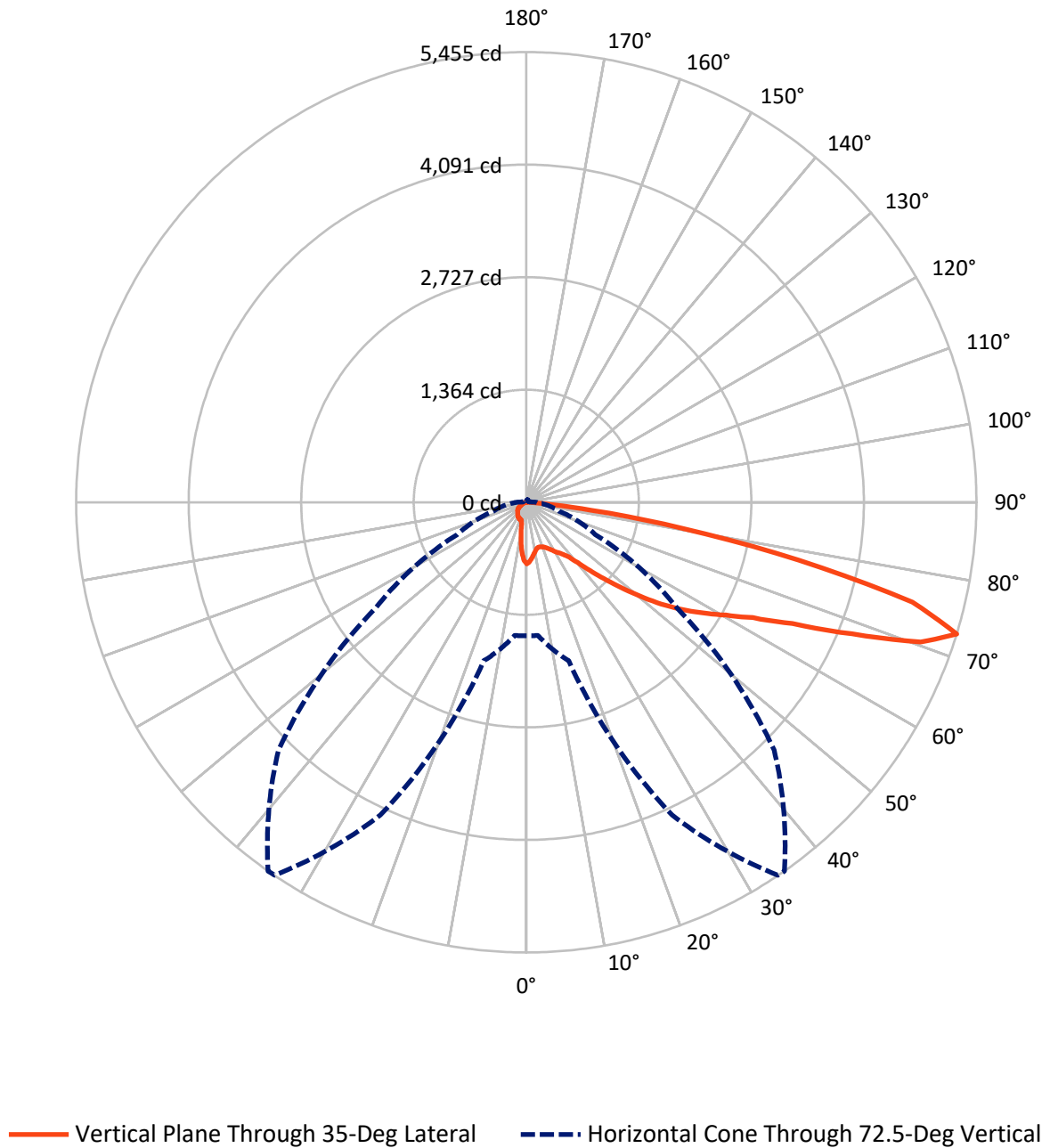
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.2 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



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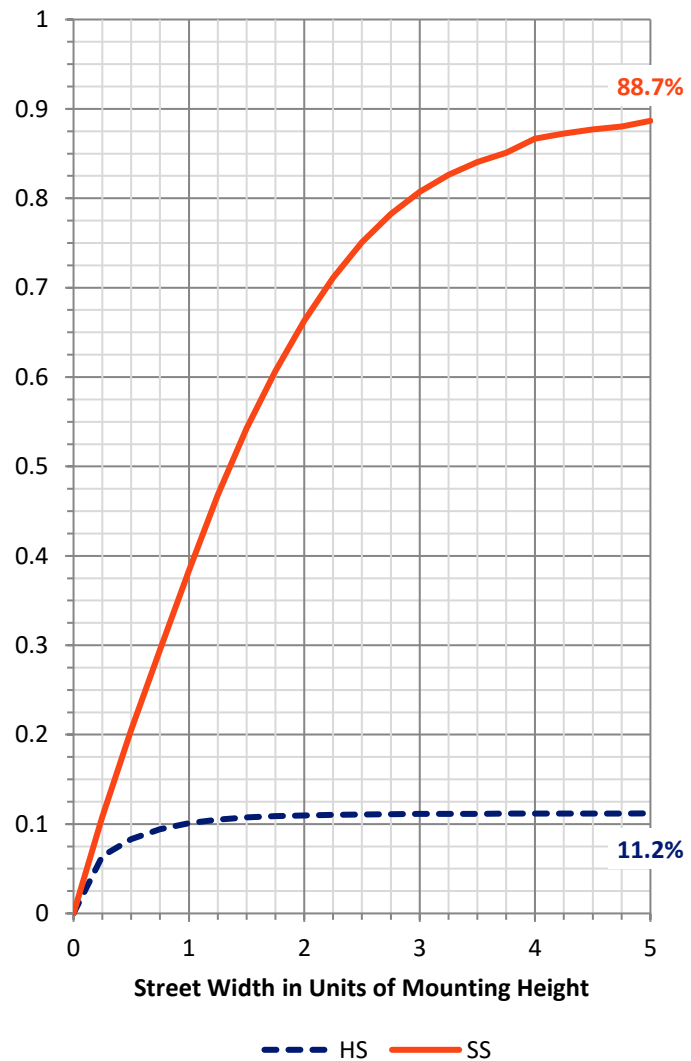
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	578.8	0.0	578.8
	% Fixture	11.3	0.0	11.3
<b>Street Side</b>	Lumens	4564.2	0.0	4564.2
	% Fixture	88.7	0.0	88.7
<b>Total</b>	Lumens	5143.0	0.0	5143.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	61.3	1.2
10°-20°	143.3	2.8
20°-30°	232.8	4.5
30°-40°	388.4	7.6
40°-50°	734.8	14.3
50°-60°	1167.6	22.7
60°-70°	1444.4	28.1
70°-80°	897.9	17.5
80°-90°	72.6	1.4
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	5143.0	100.0
0°-180°	5143.0	100.0

**Coefficient of Utilization**



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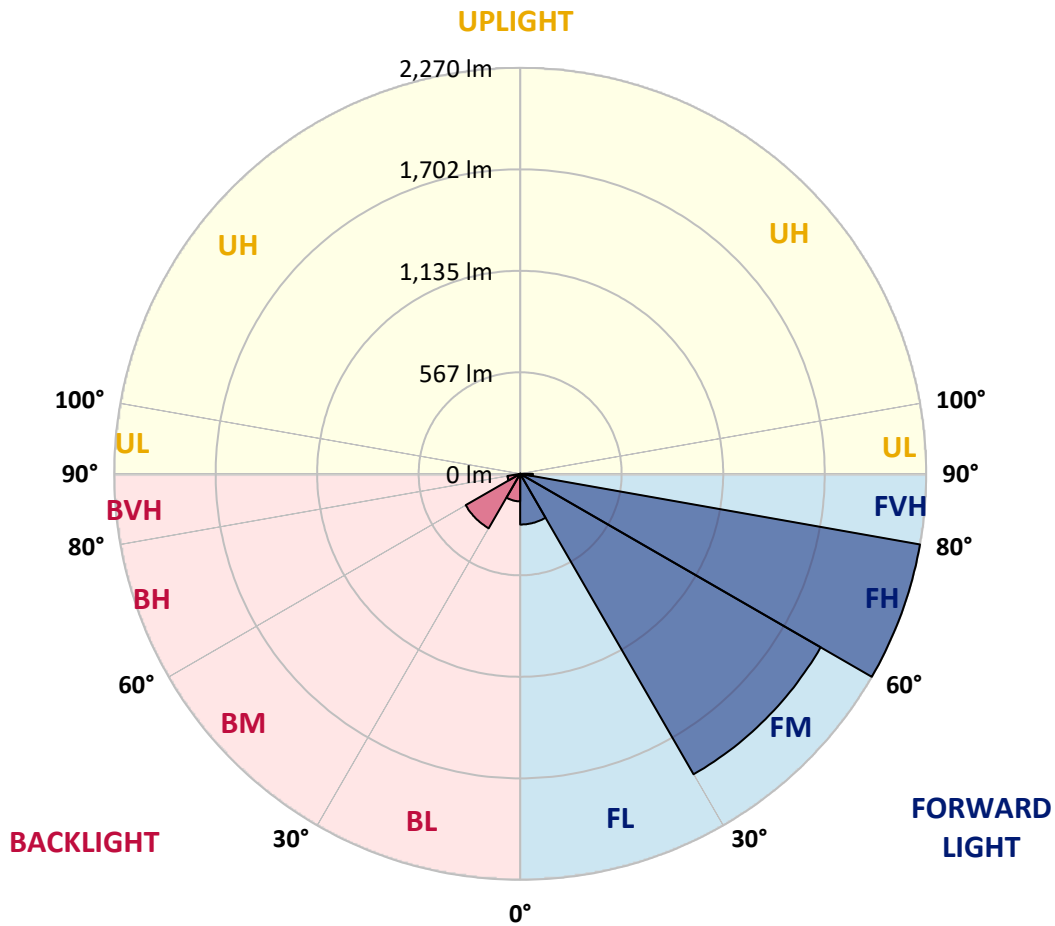
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	283.5	5.5			
FM (30°-60°)	1939.4	37.7			
FH (60°-80°)	2269.7	44.1			G2/5000
FVH (80°-90°)	71.6	1.4			G1/100
BL (0°-30°)	153.8	3.0	B1/500		
BM (30°-60°)	351.4	6.8	B1/1000		
BH (60°-80°)	72.6	1.4	B0/110		G0/110
BVH (80°-90°)	1.0	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G2**

Type IV Short



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	745.4	745.4	745.4	745.4	745.4	745.4	745.4	745.4	745.4	745.4	745.4
2.5°	712.2	718.3	719.4	721.3	721.3	723.5	727.3	732.6	741.2	745.8	748.8
5°	656.5	661.0	666.6	671.2	679.8	681.0	695.7	710.0	729.9	745.0	755.6
7.5°	600.3	605.6	613.1	624.1	635.4	638.7	661.0	685.1	716.8	745.0	762.7
10°	560.7	561.1	567.9	578.8	596.9	601.1	628.2	662.5	702.1	740.5	769.5
12.5°	538.5	541.1	544.2	552.5	569.8	572.4	601.4	641.8	687.4	737.9	777.4
15°	538.5	540.4	542.3	546.4	560.4	562.6	588.3	628.6	679.8	739.0	790.2
17.5°	544.2	547.2	545.7	550.6	565.3	566.8	589.4	624.8	679.4	746.1	809.8
20°	557.7	560.0	557.0	560.0	574.7	577.7	601.1	632.0	685.9	758.6	834.3
22.5°	579.2	580.3	573.2	575.4	590.5	594.3	621.4	652.3	701.3	778.6	867.1
25°	606.3	608.6	597.7	600.3	614.6	619.2	650.4	682.8	725.8	806.1	908.9
27.5°	637.6	638.7	629.3	628.9	647.4	653.8	685.5	720.5	758.6	840.7	961.7
30°	673.4	676.8	667.8	666.3	689.6	694.9	726.2	766.9	806.8	892.7	1036.7
32.5°	701.7	704.3	699.0	702.8	726.6	730.7	775.5	832.4	882.6	966.6	1138.8
35°	742.4	743.9	731.8	738.6	765.7	776.3	843.0	924.4	977.9	1059.3	1272.2
37.5°	889.7	889.7	838.5	804.9	830.9	840.4	935.3	1040.1	1095.5	1183.7	1440.3
40°	1093.6	1090.2	1015.2	946.6	943.2	961.7	1066.8	1185.9	1247.3	1332.9	1629.5
42.5°	1311.0	1305.8	1203.6	1135.8	1124.5	1130.9	1218.7	1365.7	1428.2	1514.9	1833.0
45°	1504.0	1502.5	1409.0	1317.8	1297.5	1317.8	1408.3	1576.0	1620.8	1712.0	2036.1
47.5°	1665.6	1665.6	1597.4	1537.9	1527.3	1539.4	1664.9	1809.2	1805.1	1921.9	2233.9
50°	1851.8	1850.3	1785.5	1759.9	1770.8	1787.7	1960.3	2054.9	1995.8	2128.0	2410.7
52.5°	1982.2	1991.2	1969.0	1964.9	2020.6	2050.0	2260.3	2295.3	2166.5	2323.6	2542.9
55°	2085.4	2096.0	2121.6	2150.6	2258.0	2296.5	2550.8	2523.3	2309.3	2493.2	2619.1
57.5°	2231.7	2216.6	2256.2	2313.4	2487.2	2533.5	2832.3	2738.5	2424.2	2630.7	2627.3
60°	2409.1	2411.4	2418.2	2490.5	2715.9	2775.4	3109.7	2942.0	2498.1	2715.1	2535.4
62.5°	2622.4	2625.8	2639.8	2750.9	3023.0	3079.2	3405.1	3108.6	2532.0	2691.4	2298.0
65°	2607.7	2622.1	2777.7	3157.9	3489.9	3545.3	3750.0	3225.4	2480.7	2474.3	1871.0
67.5°	2375.6	2399.0	2659.4	3644.1	4193.9	4255.7	4166.7	3248.4	2259.5	1924.2	1220.6
70°	2071.1	2079.4	2392.6	4081.2	5009.0	5071.5	4539.8	2995.5	1714.6	1073.2	546.8
72.5°	1617.4	1619.3	1986.7	4182.6	5451.4	5454.8	4247.0	2223.7	922.1	412.3	189.9
75°	1155.4	1144.1	1330.6	3392.0	4796.1	4834.5	3183.9	1043.1	352.3	194.8	94.6
77.5°	619.5	632.0	752.9	2011.6	3313.2	3378.8	1737.2	300.7	179.4	132.6	62.6
80°	191.4	202.0	308.6	921.0	1876.7	1916.2	644.0	133.8	125.1	94.6	41.1
82.5°	60.3	62.6	144.0	387.0	778.9	797.0	186.5	75.7	85.5	62.6	24.1
85°	17.3	17.7	64.1	144.3	192.6	196.3	52.4	29.4	49.0	38.8	12.4
87.5°	1.9	6.0	24.1	24.1	17.0	16.6	5.7	6.4	13.9	4.9	2.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	745.4	745.4	745.4	745.4	745.4	745.4	745.4	745.4	745.4	745.4	745.4
2.5°	746.9	747.3	742.4	734.1	725.0	717.5	708.1	700.5	695.3	693.8	696.4
5°	752.2	749.5	735.6	710.3	680.2	654.2	625.2	602.2	587.1	580.7	583.0
7.5°	760.1	752.6	722.0	672.3	614.6	563.4	511.4	471.1	445.4	432.6	434.5
10°	766.9	751.8	699.4	617.3	529.1	451.5	381.4	332.8	305.6	292.8	293.2
12.5°	773.3	751.4	670.0	552.1	432.6	337.7	272.5	248.3	240.8	238.2	237.4
15°	785.3	752.6	633.1	477.5	336.5	255.1	231.4	231.0	232.5	231.8	231.4
17.5°	801.9	753.7	591.3	398.3	259.6	225.0	223.8	227.2	229.5	228.4	228.0
20°	823.4	758.2	546.8	319.9	223.1	217.4	220.1	223.1	225.0	223.1	222.7
22.5°	853.5	766.1	498.2	257.0	211.4	212.9	215.2	218.6	220.5	217.8	217.4
25°	890.5	778.6	450.3	223.5	205.8	207.6	211.0	214.8	217.1	214.4	214.0
27.5°	938.3	798.5	406.2	215.9	200.1	201.2	206.1	211.8	214.8	211.4	211.4
30°	1007.7	831.3	368.2	219.3	196.7	194.1	200.9	208.8	212.2	209.1	208.8
32.5°	1099.6	877.7	344.8	224.6	195.2	185.8	192.2	202.4	208.0	206.1	206.1
35°	1220.2	948.1	335.8	230.6	194.1	177.1	181.6	192.6	202.4	204.2	204.2
37.5°	1366.4	1046.1	338.4	233.3	190.7	170.0	172.2	181.6	194.5	200.5	202.0
40°	1532.6	1160.3	353.5	230.6	186.9	163.9	164.3	171.5	182.8	191.8	194.8
42.5°	1704.1	1293.7	381.4	220.8	183.5	158.7	157.5	162.4	170.0	176.4	179.0
45°	1867.3	1430.9	408.9	207.3	179.4	153.4	150.7	152.6	154.1	156.8	158.3
47.5°	2009.7	1527.3	401.0	194.8	173.7	147.3	142.8	142.1	137.5	137.2	136.8
50°	2108.1	1548.4	356.1	182.4	165.4	140.6	133.4	128.9	121.0	117.2	117.6
52.5°	2139.3	1465.2	290.9	170.0	151.9	131.5	121.3	114.2	104.4	101.0	100.6
55°	2097.9	1302.0	232.5	154.9	133.0	119.5	108.2	98.7	90.8	86.7	86.7
57.5°	1996.5	1094.3	183.9	137.2	113.1	105.9	94.6	85.2	78.4	74.2	73.5
60°	1828.4	869.0	145.5	116.1	96.5	91.2	79.5	73.5	67.5	62.6	61.4
62.5°	1573.3	620.3	114.2	91.9	80.6	74.6	67.8	63.3	56.1	49.4	48.2
65°	1227.8	379.5	88.2	67.5	64.8	61.8	57.7	53.5	44.8	38.1	36.9
67.5°	774.4	179.8	62.9	50.9	51.3	49.7	47.9	44.5	38.1	32.0	31.3
70°	341.0	87.1	41.5	38.8	38.1	38.1	39.6	38.4	32.4	26.8	25.6
72.5°	116.1	46.7	30.9	29.4	27.5	27.1	33.2	32.0	26.0	20.7	19.6
75°	60.7	31.3	22.6	21.1	16.6	20.0	26.4	24.9	18.5	13.6	12.4
77.5°	39.6	22.2	15.5	13.6	9.4	13.2	19.6	17.3	10.9	6.8	6.0
80°	24.9	14.7	9.0	6.4	4.5	7.2	10.6	7.5	4.1	1.5	1.1
82.5°	13.2	7.5	3.4	2.3	1.9	2.3	2.6	1.9	0.8	0.0	0.0
85°	5.3	2.6	1.1	0.8	0.4	0.0	0.8	0.4	0.0	0.0	0.0
87.5°	1.9	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)